

Db 301 SKSGGNYDMENIFNGTIVVQRHPSHAFTVDNHDSPSEALESFVEWFKPLAYALTRE 360  
Qy 361 QGYPVFYDYGITPHGVPAKSKIDPILFARQKAYGRQNDYLDHNNIIGWTRGNTA 420  
Db 361 QGYPVFYDYGITPHGVPAKSKIDPILFARQKAYGRQNDYLDHNNIIGWTRGNTA 420  
Qy 421 HNSGLATIMSDGAGGKMMFVGRNKAGQVWTDITGNRAGTIVTINADGNGFNSVNGGSVS 480  
Db 421 HNSGLATIMSDGAGGKMMFVGRNKAGQVWTDITGNRAGTIVTINADGNGFNSVNGGSVS 480  
Qy 481 IWVWK 485  
Db 481 IWVWK 485

RESULT 19  
US-08-446-803-2  
; Sequence 2, Application US/08446803  
; Patent No. 5824531  
; GENERAL INFORMATION:  
; APPLICANT: Ottrup, Helle  
; APPLICANT: Biegaard-Frantzen, Henrik  
; APPLICANT: Ostergaard, Peter Rahbek  
; APPLICANT: Rasmussen, Michael Dolberg  
; APPLICANT: Van Der Zee, Pia  
; TITLE OF INVENTION: Alkaline Bacillus Amylase  
; NUMBER OF SEQUENCES: 5  
; CORRESPONDENCE ADDRESS:  
; ADDRESS: No. 5824531 No. 5824531disk of No. 5824531th America  
; STREET: 405 Lexington Avenue  
; CITY: New York  
; STATE: New York  
; COUNTRY: USA  
; ZIP: 10174  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent in Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/446,803  
; FILING DATE: 01-June-1995  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Harrington, James J.  
; REGISTRATION NUMBER: 38,711  
; REFERENCE/DOCKET NUMBER: 4157.204-US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (212) 867-0123  
; TELEFAX: (212) 878-9655  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 485 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
; US-08-446-803-2

Query Match 90.0%; Score 2437; DB 1; Length 485;  
Best Local Similarity 86.8%; Pred. No. 1.1e-201;  
Matches 421; Conservative 36; Mismatches 28; Indels 0; Gaps 0;

Qy 1 HNGTNGTMMQYFHWYLPNDGNHNRRLSDASNLKDGISAVWTPPAWKASQNDVGYGA 60  
Db 1 HNGTNGTMMQYFHWYLPNDGNHNRRLSDASNLKDGISAVWTPPAWKASQNDVGYGA 60  
Qy 61 YDLYLDFGNQKGTIRTKYGTGNLOQAVALKNSGIVQYGVVNNHKGADATEMVRV 120  
Db 61 YDLYLDFGNQKGTIRTKYGTGNLOQAVALKNSGIVQYGVVNNHKGADATEMVRV 120  
Qy 121 EWNPNRNRQVSGEYTTIETAWTKFDPGRGNTHSNFKRWYHFDGVDWQSRKLNRIYKF 180  
Db 121 EWNPNRNRQVSGEYTTIETAWTKFDPGRGNTHSNFKRWYHFDGVDWQSRKLNRIYKF 180

claimed  
01-1-a

Db 181 RHGKAWDEVDTEGNYDYLMTADIDMDHPEVNNELRWGMYTNTLGLDGRIDA VKH 240  
Qy 241 IKYSFTRDWINHVRSAATGKMFVAEFAEKNDLGAIENTYLNKTNWHSVDFVPLHYNLNA 300  
Db 241 IKYSFTRDWINHVRSAATGKMFVAEFAEKNDLGAIENTYLNKTNWHSVDFVPLHYNLNA 300  
Qy 301 SKSGGNYDMENIFNGTIVVQRHPSHAFTVDNHDSPSEALESFVEWFKPLAYALTRE 360  
Db 301 SKSGGNYDMENIFNGTIVVQRHPSHAFTVDNHDSPSEALESFVEWFKPLAYALTRE 360  
Qy 361 QGYPVFYDYGITPHGVPAKSKIDPILFARQKAYGRQNDYLDHNNIIGWTRGNTA 420  
Db 361 QGYPVFYDYGITPHGVPAKSKIDPILFARQKAYGRQNDYLDHNNIIGWTRGNTA 420  
Qy 421 HNSGLATIMSDGAGGKMMFVGRNKAGQVWTDITGNRAGTIVTINADGNGFNSVNGGSVS 480  
Db 421 HNSGLATIMSDGAGGKMMFVGRNKAGQVWTDITGNRAGTIVTINADGNGFNSVNGGSVS 480  
Qy 481 IWVWK 485  
Db 481 IWVWK 485

RESULT 18  
US-09-441-313-6  
; Sequence 6, Application US/09441313  
; Patent No. 6887986  
; GENERAL INFORMATION:  
; APPLICANT: Svendsen, Allan  
; APPLICANT: Kjruliff, S ren  
; APPLICANT: Biegaard-Frantzen, Henrik  
; APPLICANT: Andersen, Carsten  
; TITLE OF INVENTION: -Amylase Variants  
; FILE REFERENCE: 5709.000-US  
; CURRENT APPLICATION NUMBER: US/09/441,313  
; CURRENT FILING DATE: 1999-11-16  
; EARLIER APPLICATION NUMBER: 09/193,068  
; EARLIER FILING DATE: 1998-11-16  
; NUMBER OF SEQ ID NOS: 31  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 6  
; LENGTH: 485  
; TYPE: PRT  
; ORGANISM: Bacillus sp.  
; US-09-441-313-6

Query Match 96.5%; Score 2613; DB 2; Length 485;  
Best Local Similarity 95.5%; Pred. No. 7.5e-217;  
Matches 463; Conservative 13; Mismatches 9; Indels 0; Gaps 0;

Qy 1 HNGTNGTMMQYFHWYLPNDGNHNRRLSDASNLKDGISAVWTPPAWKASQNDVGYGA 60  
Db 1 HNGTNGTMMQYFHWYLPNDGNHNRRLSDASNLKDGISAVWTPPAWKASQNDVGYGA 60  
Qy 61 YDLYLDFGNQKGTIRTKYGTGNLOQAVALKNSGIVQYGVVNNHKGADATEMVRV 120  
Db 61 YDLYLDFGNQKGTIRTKYGTGNLOQAVALKNSGIVQYGVVNNHKGADATEMVRV 120  
Qy 121 EWNPNRNRQVSGEYTTIETAWTKFDPGRGNTHSNFKRWYHFDGVDWQSRKLNRIYKF 180  
Db 121 EWNPNRNRQVSGEYTTIETAWTKFDPGRGNTHSNFKRWYHFDGVDWQSRKLNRIYKF 180  
Qy 181 RGDGKAWDEVDTEGNYDYLMTADIDMDHPEVNNELRWGMYTNTLGLDGRIDA VKH 240  
Db 181 RGDGKAWDEVDTEGNYDYLMTADIDMDHPEVNNELRWGMYTNTLGLDGRIDA VKH 240  
Qy 241 IKYSFTRDWINHVRSAATGKMFVAEFAEKNDLGAIENTYLNKTNWHSVDFVPLHYNLNA 300  
Db 241 IKYSFTRDWINHVRSAATGKMFVAEFAEKNDLGAIENTYLNKTNWHSVDFVPLHYNLNA 300  
Qy 301 SKSGGNYDMENIFNGTIVVQRHPSHAFTVDNHDSPSEALESFVEWFKPLAYALTRE 360  
Db 301 SKSGGNYDMENIFNGTIVVQRHPSHAFTVDNHDSPSEALESFVEWFKPLAYALTRE 360

Db 121 EVNPNRNRQEIISGDIYTIKWTGKDFPGRGNTYSDFKRWYHFDGVDWDQSRQFNRIYKF 180  
Qy 181 RGDGKWDWEVDYDNGYDLYADIDMDHPEVNVNLRNMGVWYTNLTGLDGRIDAVKH 240  
Db 181 RGDGKWDWEVDSENGYDLYADIDMDHPEVNVNLRNMGVWYTNLTGLDGRIDAVKH 240  
Qy 241 IKYSFTDWINHVRATGKMFVAEFAWKNDLGAIEYLNKTNWNSHVSFVDFPLHYNLYNA 300  
Db 241 IKYSFTDWINHVRATGKMFVAEFAWKNDLGAIEYLNKTNWNSHVSFVDFPLHYNLYNA 300  
Qy 301 SKSGGNYDMQIENGTVVQHPHMAVTFVDNHDSPBEALESFVEFWFKPLAYALITRE 360  
Db 301 SKSGGNYDMQIENGTVVQHPHMAVTFVDNHDSPBEALESFVEFWFKPLAYALITRE 360  
Qy 361 QGYPVSFYGYDYGIPHTGVPAKSKIDPILKARQYAGVGRQNDYLDHNNIIGWTREGNTA 420  
Db 361 QGYPVSFYGYDYGIPHTGVPAKSKIDPILKARQYAGVGRQNDYLDHNNIIGWTREGNTA 420  
Qy 421 HNSGLATIMSDGAGGKMFVGRNKAQGVWTDITGNRAGTVTINADGWNFSVNGGSVS 480  
Db 421 HNSGLATIMSDGAGGKMFVGRNKAQGVWTDITGNRAGTVTINADGWNFSVNGGSVS 480  
Qy 481 IWVWK 485  
Db 481 IWVWK 485

## RESULT 20

US-08-861-837-2  
; Sequence 2, Application US/08861837  
; Patent No. 5856164  
GENERAL INFORMATION:  
; APPLICANT: Orla-Pup, Helle  
; APPLICANT: Bisgaard-Frantzen, Henrik  
; APPLICANT: Ostergaard, Peter Rahbek  
; APPLICANT: Rasmussen, Michael Dolberg  
; APPLICANT: Van Der Zee, Pia  
; TITLE OF INVENTION: Alkaline Bacillus Amylase  
; NUMBER OF SEQUENCES: 5  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: No. 5856164 No. 5856164disk of No. 5856164th America  
; STREET: 405 Lexington Avenue  
; CITY: New York  
; STATE: New York  
; COUNTRY: USA  
; ZIP: 10174  
COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/861,837  
; FILING DATE:  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/446,803  
; FILING DATE: 01-June-1995  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Harrington, James J.  
; REGISTRATION NUMBER: 38,711  
; REFERENCE/DOCKET NUMBER: 4157.204-US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (212) 867-0123  
; TELEFAX: (212) 878-9655  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 485 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
US-08-861-837-2

Query Match 90.0%; Score 2437; DB 1; Length 485;  
Best Local Similarity 86.8%; Pred. No. 1.1e-201;  
Matches 421; Conservative 36; Mismatches 28; Indels 0; Gaps 0;  
Qy 1 HNGTNGTMMQYFEWYLPNDGNHNRRLRSASLKDKGISAVWIPPAWKASQNDVGVGA 60  
Db 1 HNGTNGTMMQYFEWYLPNDGNHNRRLRSASLKDKGISAVWIPPAWKASQNDVGVGA 60  
Qy 61 YDLYDLGEFNQKQITRTKYGTNRNQLQAANVALKSGIQYVYGVVMMHKGADATEMVRV 120  
Db 61 YDLYDLGEFNQKQITRTKYGTNRNQLQAANVALKSGIQYVYGVVMMHKGADATEMVRV 120  
Qy 121 EVNPNRNRQEIISGDIYTIKWTGKDFPGRGNTYSDFKRWYHFDGVDWDQSRQFNRIYKF 180  
Db 121 EVNPNRNRQEIISGDIYTIKWTGKDFPGRGNTYSDFKRWYHFDGVDWDQSRQFNRIYKF 180  
Qy 181 RGDGKWDWEVDYDNGYDLYADIDMDHPEVNVNLRNMGVWYTNLTGLDGRIDAVKH 240  
Db 181 RGDGKWDWEVDSENGYDLYADIDMDHPEVNVNLRNMGVWYTNLTGLDGRIDAVKH 240  
Qy 241 IKYSFTDWINHVRATGKMFVAEFAWKNDLGAIEYLNKTNWNSHVSFVDFPLHYNLYNA 300  
Db 241 IKYSFTDWINHVRATGKMFVAEFAWKNDLGAIEYLNKTNWNSHVSFVDFPLHYNLYNA 300  
Qy 301 SKSGGNYDMQIENGTVVQHPHMAVTFVDNHDSPBEALESFVEFWFKPLAYALITRE 360  
Db 301 SKSGGNYDMQIENGTVVQHPHMAVTFVDNHDSPBEALESFVEFWFKPLAYALITRE 360  
Qy 361 QGYPVSFYGYDYGIPHTGVPAKSKIDPILKARQYAGVGRQNDYLDHNNIIGWTREGNTA 420  
Db 361 QGYPVSFYGYDYGIPHTGVPAKSKIDPILKARQYAGVGRQNDYLDHNNIIGWTREGNTA 420  
Qy 421 HNSGLATIMSDGAGGKMFVGRNKAQGVWTDITGNRAGTVTINADGWNFSVNGGSVS 480  
Db 421 HNSGLATIMSDGAGGKMFVGRNKAQGVWTDITGNRAGTVTINADGWNFSVNGGSVS 480  
Qy 481 IWVWK 485  
Db 481 IWVWK 485

## RESULT 21

US-08-600-656-2  
; Sequence 2, Application US/08600656  
; Patent No. 6093562  
GENERAL INFORMATION:  
; APPLICANT: Bisgaard-Frantzen, Henrik  
; APPLICANT: Svendsen, Allan  
; APPLICANT: Borchert, Torben Vedel  
; TITLE OF INVENTION: AMYLASE VARIANTS  
; NUMBER OF SEQUENCES: 32  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: No. 6093562 No. 6093562disk of No. 6093562th America, Inc.  
; STREET: 405 Lexington Avenue, Suite 6400  
; CITY: New York  
; STATE: New York  
; COUNTRY: U.S.A.  
; ZIP: 10174-6401  
COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25 (BPO)  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/600,656  
; FILING DATE: 13-FEB-1996  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Lambirie, Elias J.  
; REGISTRATION NUMBER: 33,728  
; REFERENCE/DOCKET NUMBER: 4318.204-US  
; TELECOMMUNICATION INFORMATION:

TELEPHONE: 212 867 0123  
 TELEFAX: 212 867 0298  
 INFORMATION FOR SEQ ID NO: 2:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 485 amino acids  
 TYPE: amino acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: peptide  
 US-08-600-656-2

Query Match 90.0%; Score 2437; DB 2; Length 485;  
 Best Local Similarity 86.8%; Pred. No. 1.1e-201;  
 Matches 421; Conservative 36; Mismatches 28; Indels 0; Gaps 0;

```

Qy 1 HHNGTNGTMMQYFEWYLPNDGNHNRRLSDASNLKDGISAVWIPPAWKGSQNDVGGA 60
Db 1 HHNGTNGTMMQYFEWYLPNDGNHNRRLSDASNLKDGISAVWIPPAWKGSQNDVGGA 60
Qy 61 YDLGLGEFNGKGTIRTKYGRNQLQAAVNAKNSGIQVYGVVNMHKGADATENVRV 120
Db 61 YDLGLGEFNGKGTIRTKYGRNQLQAAVNAKNSGIQVYGVVNMHKGADATENVRV 120
Qy 121 EVNPNRNRQVSGEYTTIEAWTKFDPGGRGNTHSNFKRWYTHFDGVDQSRKLNRIYKF 180
Db 121 EVNPNRNRQVSGEYTTIEAWTKFDPGGRGNTHSNFKRWYTHFDGVDQSRKLNRIYKF 180
Qy 181 RGDGKGDWEDVTENGNDYLYMADIDMDHPEVNVNLRNMGVWYTTNTLGLDGFPRIDAVKH 240
Db 181 RGDGKADWEDVSENGNDYLYMADIDMDHPEVNVNLRNMGVWYTTNTLGLDGFPRIDAVKH 240
Qy 241 IKYSFTRDWINHVRSAATGKMPFAVAFWKNLGAENLYLNKTNHNSVDFVPLHYNLYNA 300
Db 241 IKYSFTRDWINHVRSAATGKMPFAVAFWKNLGAENLYLNKTNHNSVDFVPLHYNLYNA 300
Qy 301 SKSGGNDYDMEQIFNGTVVQHPMHAVTFVDNHDQPEALESFVEWFKPLAYALTITRE 360
Db 301 SKSGGNDYDMEQIFNGTVVQHPMHAVTFVDNHDQPEALESFVEWFKPLAYALTITRE 360
Qy 361 QGYPSPVFGDYGIPTGHPVPAKSKIDPILFARQKAYAGRONDYLDDHNIIGWTREGNTA 420
Db 361 QGYPSPVFGDYGIPTGHPVPAKSKIDPILFARQKAYAGRONDYLDDHNIIGWTREGNTA 420
Qy 421 HPNSGLATIMSDGAGGKMMFVGRNKGAGQVWTDITGNRAGTGTINADGWNFSVNGGSVS 480
Db 421 HPNSGLATIMSDGAGGKMMFVGRNKGAGQVWTDITGNRAGTGTINADGWNFSVNGGSVS 480
Qy 481 IWVWK 485
Db 481 IWVWK 485

```

RESULT 22  
 US-09-170-670-2  
 ; Sequence 2, Application US/09170670  
 ; Patent No. 6187576  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Svendsen, Allan  
 ; APPLICANT: Borcherdt, Torben  
 ; APPLICANT: Biogard-Frantzen Henrik  
 ; TITLE OF INVENTION: Alpha-Amylase Mutants  
 ; FILE REFERENCE: 5276.200-US  
 ; CURRENT APPLICATION NUMBER: US/09/170,670  
 ; EARLIER FILING DATE: 1997-10-13  
 ; EARLIER FILING DATE: 1997-10-13  
 ; EARLIER FILING DATE: 1997-10-13  
 ; EARLIER FILING DATE: 1997-10-13  
 ; SOFTWARE: Fast-SEQ for Windows Version 3.0  
 ; SEQ ID NO 2  
 ; LENGTH: 485  
 ; TYPE: PRT

ORGANISM: Bacillus sp.  
 US-09-170-670-2

Query Match 90.0%; Score 2437; DB 2; Length 485;  
 Best Local Similarity 86.8%; Pred. No. 1.1e-201;  
 Matches 421; Conservative 36; Mismatches 28; Indels 0; Gaps 0;

```

Qy 1 HHNGTNGTMMQYFEWYLPNDGNHNRRLSDASNLKDGISAVWIPPAWKGSQNDVGGA 60
Db 1 HHNGTNGTMMQYFEWYLPNDGNHNRRLSDASNLKDGISAVWIPPAWKGSQNDVGGA 60
Qy 61 YDLGLGEFNGKGTIRTKYGRNQLQAAVNAKNSGIQVYGVVNMHKGADATENVRV 120
Db 61 YDLGLGEFNGKGTIRTKYGRNQLQAAVNAKNSGIQVYGVVNMHKGADATENVRV 120
Qy 121 EVNPNRNRQVSGEYTTIEAWTKFDPGGRGNTHSNFKRWYTHFDGVDQSRKLNRIYKF 180
Db 121 EVNPNRNRQVSGEYTTIEAWTKFDPGGRGNTHSNFKRWYTHFDGVDQSRKLNRIYKF 180
Qy 181 RGDGKGDWEDVTENGNDYLYMADIDMDHPEVNVNLRNMGVWYTTNTLGLDGFPRIDAVKH 240
Db 181 RGDGKADWEDVSENGNDYLYMADIDMDHPEVNVNLRNMGVWYTTNTLGLDGFPRIDAVKH 240
Qy 241 IKYSFTRDWINHVRSAATGKMPFAVAFWKNLGAENLYLNKTNHNSVDFVPLHYNLYNA 300
Db 241 IKYSFTRDWINHVRSAATGKMPFAVAFWKNLGAENLYLNKTNHNSVDFVPLHYNLYNA 300
Qy 301 SKSGGNDYDMEQIFNGTVVQHPMHAVTFVDNHDQPEALESFVEWFKPLAYALTITRE 360
Db 301 SKSGGNDYDMEQIFNGTVVQHPMHAVTFVDNHDQPEALESFVEWFKPLAYALTITRE 360
Qy 361 QGYPSPVFGDYGIPTGHPVPAKSKIDPILFARQKAYAGRONDYLDDHNIIGWTREGNTA 420
Db 361 QGYPSPVFGDYGIPTGHPVPAKSKIDPILFARQKAYAGRONDYLDDHNIIGWTREGNTA 420
Qy 421 HPNSGLATIMSDGAGGKMMFVGRNKGAGQVWTDITGNRAGTGTINADGWNFSVNGGSVS 480
Db 421 HPNSGLATIMSDGAGGKMMFVGRNKGAGQVWTDITGNRAGTGTINADGWNFSVNGGSVS 480
Qy 481 IWVWK 485
Db 481 IWVWK 485

```

RESULT 23  
 US-09-170-670-8  
 ; Sequence 8, Application US/09170670  
 ; Patent No. 6187576  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Svendsen, Allan  
 ; APPLICANT: Borcherdt, Torben  
 ; APPLICANT: Biogard-Frantzen Henrik  
 ; TITLE OF INVENTION: Alpha-Amylase Mutants  
 ; FILE REFERENCE: 5276.200-US  
 ; CURRENT APPLICATION NUMBER: US/09/170,670  
 ; EARLIER FILING DATE: 1997-10-13  
 ; EARLIER FILING DATE: 1997-10-13  
 ; EARLIER FILING DATE: 1997-10-13  
 ; EARLIER FILING DATE: 1997-10-13  
 ; SOFTWARE: Fast-SEQ for Windows Version 3.0  
 ; SEQ ID NO 8  
 ; LENGTH: 485  
 ; TYPE: PRT  
 ; ORGANISM: Bacillus sp.  
 US-09-170-670-8

Query Match 90.0%; Score 2437; DB 2; Length 485;  
 Best Local Similarity 86.8%; Pred. No. 1.1e-201;  
 Matches 421; Conservative 36; Mismatches 28; Indels 0; Gaps 0;

Qy 1 HHNGTNGTMMQYFEWYLPNDGNHNRRLSDASNLKDGISAVWIPPAWKGSQNDVGGA 60

QY	181	RGDGKWDWEVDTE	NGNYDYLATADIMDHP	VVNNELRNWGVY	TNTLGLDGP	FRIDAVKH	240
Db	181	RGDGKAWDWEVDS	ENGNYDYLATADYDMD	HPVVNNELRRWGE	YTNLTNL	DGPFRIDAVKH	240
QY	241	IKYSFTRDWNHVR	SATGKMPFAVAFWKND	LGAENYLNKTNWNH	SFVDPVPLH	NYLNA	300
Db	241	IKYSFTRDNLTH	VRNATGKMPFAVAFWKND	LGAENYLNKTNWNH	SFVDPVPLH	NYLNA	300
QY	301	SKSGGNYDMRQI	PNGTVQRPMPH	AVTFVDNHD	SQPEEAL	ESFVEERWFKPLAYALTLTRE	360
Db	301	SNSGGNYDMAKL	INGTVVQKPH	AVTFVDNHD	SQPEEAL	ESFVEERWFKPLAYALTLTRE	360
QY	361	QGVPSVFYGDY	GIPTHGVPAMKSK	DPIL	EARQKAY	GRONDYLDHNNIIGWTR	420
Db	361	QGVPSVFYGDY	GIPTHSPVAMKAK	DPIL	EARQNFAYG	TDHDFDHHNIIGWTR	420
QY	421	HPNSGLATIMSD	GAGKNKMFVGR	NKAGOVWTDIT	GNRAC	TVTINADGWGNFSVNGG	480
Db	421	HPNSGLATIMSD	GPGGKWMYVGN	KAGOVWHDIT	GNKPG	TVTINADGWANFSVNGG	480
QY	481	IWNK	485				
Db	481	IWVR	485				

RESULT 25

US-09-193-068-8

; Sequence 8, Application US/09193068

; Patent No. 6197565

; GENERAL INFORMATION:

; APPLICANT: Swandee, Allan

; APPLICANT: Kjrulff, S ren

; APPLICANT: Bisgaard-Frantzen, Henrik

RESULT 25  
 US-09-193-068-8  
 ; Sequence 8, Application US/09193068  
 ; Patent No. 6197565  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Swadlow, Allan  
 ; APPLICANT: Kjullif, S ren  
 ; APPLICANT: Bisgaard-Frantzen, Henrik  
 ; APPLICANT: Andersen, Carsten  
 ; TITLE OF INVENTION: -Amylase Variants  
 ; FILE REFERENCE: 5709.000-US  
 ; CURRENT APPLICATION NUMBER: US/09/193,068  
 ; CURRENT FILING DATE: 1998-11-16  
 ; NUMBER OF SEQ ID NOS: 31  
 ; SOFTWARE: FastSeq for Windows Version 3.0  
 ; SEQ ID NO 8  
 ; LENGTH: 485  
 ; TYPE: FRT  
 ; ORGANISM: Bacillus sp.  
 US-09-193-068-8

[illegible]

61	YDL	YDLGFEFNQKGVTRKYGTR	QSEIAH	IAH	KNGVQVIGDVVNNHGGADATEN	VLAV	120
121	EV	NNPNNR	QEVSGE	YTTIEA	WTKFDPGRGN	THSNFKRWYHFDGVDQSRKLNRIYKF	180
121	EV	NNPNNR	QEVSGE	YTTIEA	WTKFDPGRGN	THSNFKRWYHFDGVDQSRKLNRIYKF	180
181	RG	DGKGWD	WEVDTE	NGNYDLY	MAVIDMDHP	EVNNELRNCGWVTNTLGLDGFRI	DAVKH 240
181	RG	DGKAWD	WEVDS	ENGNYDLY	MAVIDMDHP	EVNNELRNCGWVTNTLGLDGFRI	DAVKH 240
241	IK	YSPTRD	WINH	VSATG	KMFAVAE	FPKNDLGAENYLKNTNNHNSVFDVPLHNLNA	300
241	IK	YSPTRD	MLTH	VRNATG	KMFAVAE	FPKNDLGAENYLKNTNNHNSVFDVPLHNLNA	300
301	SK	SGGNYD	MRQIF	NGTVVQ	RHPMHA	VTVDNHD	SPBEALESFVEEFPKLYALTITRE 360

QY 361 QGYPVFYGDYGIPTGHPVPAKSKIDPILBARQKAYGRQNDYLDHNNIIGWTREGNTA 420  
 Db 361 QGYPVFYGDYGIPTGHPVPAKSKIDPILBARQKAYGRQNDYLDHNNIIGWTREGNTA 420  
 QY 421 HNSGLATIMSDGAGGNKMFVGRNKAQGVWTDITGNRAGTITINADGWNFSVNGGSVS 480  
 Db 421 HNSGLATIMSDGAGGNKMFVGRNKAQGVWTDITGNRAGTITINADGWNFSVNGGSVS 480  
 QY 481 IWVVK 485  
 Db 481 IWVKR 485

RESULT 26  
 US-09-183-412-2  
 ; Sequence 2, Application US/09183412  
 ; Patent No. 620432

GENERAL INFORMATION:  
 ; APPLICANT: Borchert, Torben V.  
 ; APPLICANT: Svendsen, Allan  
 ; APPLICANT: Andersen, Carsten  
 ; APPLICANT: Nielsen, Bjarne  
 ; APPLICANT: Nissen, Torben L.  
 ; APPLICANT: Kjaerulff, Soren  
 ; TITLE OF INVENTION: Alpha-Amulase Mutants  
 ; FILE REFERENCE: 5368.200-US  
 ; CURRENT APPLICATION NUMBER: US/09/183,412  
 ; CURRENT FILING DATE: 1998-10-30  
 ; EARLIER APPLICATION NUMBER: 60/064,662  
 ; EARLIER FILING DATE: 1997-11-06  
 ; EARLIER APPLICATION NUMBER: 60/093,234  
 ; EARLIER FILING DATE: 1998-07-17  
 ; EARLIER APPLICATION NUMBER: 1240/97  
 ; EARLIER FILING DATE: 1997-10-30  
 ; EARLIER APPLICATION NUMBER: PA 1998 00936  
 ; EARLIER FILING DATE: 1998-07-14  
 ; NUMBER OF SEQ ID NOS: 58  
 ; SOFTWARE: FastSEQ for Windows Version 3.0  
 ; SEQ ID NO 2  
 ; LENGTH: 485  
 ; TYPE: PRT  
 ; ORGANISM: Bacillus sp.  
 US-09-183-412-2

Query Match 90.0%; Score 2437; DB 2; Length 485;  
 Best Local Similarity 86.8%; Pred. No. 1.1e-201;  
 Matches 421; Conservative 36; Mismatches 28; Indels 0; Gaps 0;  
 QY 1 HNGTNGTMMQYFEWYLPNDGNHNRRLSDASNLKDKGISAVWIPPAWKGSQNDVGGA 60  
 Db 1 HNGTNGTMMQYFEWYLPNDGNHNRRLSDASNLKDKGISAVWIPPAWKGSQNDVGGA 60  
 QY 61 YDLYLGEFNGKQRTIKYGTNRQLOAVNALKNGIQVYGVVNMHKGADATMVRV 120  
 Db 61 YDLYLGEFNGKQRTIKYGTNRQLOAVNALKNGIQVYGVVNMHKGADATMVRV 120  
 QY 121 EVNPNRNRQSVGEYTIKWTKEFGGRNTHSNFKNRWYHFDGVDMQSKLNNRIYKF 180  
 Db 121 EVNPNRNRQSVGEYTIKWTKEFGGRNTHSNFKNRWYHFDGVDMQSKLNNRIYKF 180  
 QY 181 RGDGKAWDEVDTEGNGYDILMYADIMDHPEVNVNLRNMGVWYTNLTGLDGFPRIDAVKH 240  
 Db 181 RGDGKAWDEVDTEGNGYDILMYADIMDHPEVNVNLRNMGVWYTNLTGLDGFPRIDAVKH 240  
 QY 241 IKYSFTDWINHVSATGKNMFAVAEFWQNDLGAENYLNKTNHNSVDFVPLHYNLYNA 300  
 Db 241 IKYSFTDWINHVSATGKNMFAVAEFWQNDLGAENYLNKTNHNSVDFVPLHYNLYNA 300  
 QY 301 SKSGGNDMROIFNGTIVVQHPMHAFTFVDNHDSDQPEALESFVEWFKPLAYALITRE 360  
 Db 301 SKSGGNDMROIFNGTIVVQHPMHAFTFVDNHDSDQPEALESFVEWFKPLAYALITRE 360  
 QY 361 SNSGGNDMAKLNGTIVVQHPMHAFTFVDNHDSDQPEALESFVEWFKPLAYALITRE 360

QY 361 QGYPVFYGDYGIPTGHPVPAKSKIDPILBARQKAYGRQNDYLDHNNIIGWTREGNTA 420  
 Db 361 QGYPVFYGDYGIPTGHPVPAKSKIDPILBARQKAYGRQNDYLDHNNIIGWTREGNTA 420  
 QY 421 HNSGLATIMSDGAGGNKMFVGRNKAQGVWTDITGNRAGTITINADGWNFSVNGGSVS 480  
 Db 421 HNSGLATIMSDGAGGNKMFVGRNKAQGVWTDITGNRAGTITINADGWNFSVNGGSVS 480  
 QY 481 IWVVK 485  
 Db 481 IWVKR 485

RESULT 27  
 US-09-183-412-8  
 ; Sequence 8, Application US/09183412  
 ; Patent No. 620432

GENERAL INFORMATION:  
 ; APPLICANT: Borchert, Torben V.  
 ; APPLICANT: Svendsen, Allan  
 ; APPLICANT: Andersen, Carsten  
 ; APPLICANT: Nielsen, Bjarne  
 ; APPLICANT: Nissen, Torben L.  
 ; APPLICANT: Kjaerulff, Soren  
 ; TITLE OF INVENTION: Alpha-Amulase Mutants  
 ; FILE REFERENCE: 5368.200-US  
 ; CURRENT APPLICATION NUMBER: US/09/183,412  
 ; CURRENT FILING DATE: 1998-10-30  
 ; EARLIER APPLICATION NUMBER: 60/064,662  
 ; EARLIER FILING DATE: 1997-11-06  
 ; EARLIER APPLICATION NUMBER: 60/093,234  
 ; EARLIER FILING DATE: 1998-07-17  
 ; EARLIER APPLICATION NUMBER: 1240/97  
 ; EARLIER FILING DATE: 1997-10-30  
 ; EARLIER APPLICATION NUMBER: PA 1998 00936  
 ; EARLIER FILING DATE: 1998-07-14  
 ; NUMBER OF SEQ ID NOS: 58  
 ; SOFTWARE: FastSEQ for Windows Version 3.0  
 ; SEQ ID NO 8  
 ; LENGTH: 485  
 ; TYPE: PRT  
 ; ORGANISM: Bacillus sp.  
 US-09-183-412-8

Query Match 90.0%; Score 2437; DB 2; Length 485;  
 Best Local Similarity 86.8%; Pred. No. 1.1e-201;  
 Matches 421; Conservative 36; Mismatches 28; Indels 0; Gaps 0;  
 QY 1 HNGTNGTMMQYFEWYLPNDGNHNRRLSDASNLKDKGISAVWIPPAWKGSQNDVGGA 60  
 Db 1 HNGTNGTMMQYFEWYLPNDGNHNRRLSDASNLKDKGISAVWIPPAWKGSQNDVGGA 60  
 QY 61 YDLYLGEFNGKQRTIKYGTNRQLOAVNALKNGIQVYGVVNMHKGADATMVRV 120  
 Db 61 YDLYLGEFNGKQRTIKYGTNRQLOAVNALKNGIQVYGVVNMHKGADATMVRV 120  
 QY 121 EVNPNRNRQSVGEYTIKWTKEFGGRNTHSNFKNRWYHFDGVDMQSKLNNRIYKF 180  
 Db 121 EVNPNRNRQSVGEYTIKWTKEFGGRNTHSNFKNRWYHFDGVDMQSKLNNRIYKF 180  
 QY 181 RGDGKAWDEVDTEGNGYDILMYADIMDHPEVNVNLRNMGVWYTNLTGLDGFPRIDAVKH 240  
 Db 181 RGDGKAWDEVDTEGNGYDILMYADIMDHPEVNVNLRNMGVWYTNLTGLDGFPRIDAVKH 240  
 QY 241 IKYSFTDWINHVSATGKNMFAVAEFWQNDLGAENYLNKTNHNSVDFVPLHYNLYNA 300  
 Db 241 IKYSFTDWINHVSATGKNMFAVAEFWQNDLGAENYLNKTNHNSVDFVPLHYNLYNA 300  
 QY 301 SKSGGNDMROIFNGTIVVQHPMHAFTFVDNHDSDQPEALESFVEWFKPLAYALITRE 360  
 Db 301 SKSGGNDMROIFNGTIVVQHPMHAFTFVDNHDSDQPEALESFVEWFKPLAYALITRE 360  
 QY 361 QGYPVFYGDYGIPTGHPVPAKSKIDPILBARQKAYGRQNDYLDHNNIIGWTREGNTA 420

Db 361 QGYPSVFTGYDYGIPTHSVPAKAKIDPILBARQNFAYGTQHDYFDHNIIGWTREGNTT 420  
Qy 421 HPNSGLATIMSDGAGNKMVFGRNKAGOVWTDITGNRAGTGTINADGNGHFSVNGGSVS 480  
Db 421 HPNSGLATIMSDGPGGRKMYVQGNKAGOVWHDITGNKPGTGTINADGNGHFSVNGGSVS 480  
Qy 481 IWVWK 485  
Db 481 IWVWK 485  
RESULT 28  
US-09-264-097-5  
; Sequence 5, Application US/09264097  
; Patent No. 6287826  
; GENERAL INFORMATION:  
; APPLICANT: Hendriksen, Barrie Edmund  
; TITLE OF INVENTION: Enzymatic Preparation of Glucose Syrup  
; FILE REFERENCE: 5278.200-US  
; CURRENT APPLICATION NUMBER: US/09/264,097  
; CURRENT FILING DATE: 1999-03-08  
; EARLIER APPLICATION NUMBER: PA 0321/98  
; EARLIER FILING DATE: 1998-03-09  
; EARLIER APPLICATION NUMBER: 60/079,209  
; EARLIER FILING DATE: 1998-03-24  
; NUMBER OF SEQ ID NOS: 8  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 5  
; LENGTH: 485  
; TYPE: PRT  
; ORGANISM: Bacillus  
US-09-264-097-5

Query Match 90.0%; Score 2437; DB 2; Length 485;  
Best Local Similarity 86.8%; Pred. No. 1.1e-201;  
Matches 421; Conservative 36; Mismatches 28; Indels 0; Gaps 0;  
Qy 1 HNGTNGTMMQYFWYLPNDGNHNRRLSDASNLKDKGISAVTIPPAWKASQNDVGYGA 60  
Db 1 HNGTNGTMMQYFEWHLFNDGNHNRRLSDASNLKDKGISAVTIPPAWKASQNDVGYGA 60  
Qy 61 YDLYLGEFNQKGTIRTKYGTNRQLOAAVNAKNSGIVQYGVVNMHKGADATENVAV 120  
Db 61 YDLYLGEFNQKGTIRTKYGTNRQLOAAVNAKNSGIVQYGVVNMHKGADATENVAV 120  
Qy 121 EVNPNRNRQESGYTIEAWTKFDPGRGNTHSNFKRWYHFDGVDWDQSRKLNRIYKF 180  
Db 121 EVNPNRNRQESGYTIEAWTKFDPGRGNTHSNFKRWYHFDGVDWDQSRKLNRIYKF 180  
Qy 181 RGDGKGDWDEVDTEGNGYDLYMADI DMHPVNNELRNWGVYNTLTGLDGFRIIDAVKH 240  
Db 181 RGDGKGDWDEVDTEGNGYDLYMADI DMHPVNNELRNWGVYNTLTGLDGFRIIDAVKH 240  
Qy 241 IKYSPTDWINHVRNATGKMFVAEFAFWKNDLGALENYLNKTNHNSVFDVPLHYNLNA 300  
Db 241 IKYSPTDWINHVRNATGKMFVAEFAFWKNDLGALENYLNKTNHNSVFDVPLHYNLNA 300  
Qy 301 SKSGGNDYMRQIFNGTIVQHPHMAVTFVNDHDSQPEALSFVEWFKPLAVALITRE 360  
Db 301 SKSGGNDYMRQIFNGTIVQHPHMAVTFVNDHDSQPEALSFVEWFKPLAVALITRE 360  
Qy 361 QGYPSVFTGYDYGIPTHSVPAKAKIDPILBARQNFAYGTQHDYFDHNIIGWTREGNTA 420  
Db 361 QGYPSVFTGYDYGIPTHSVPAKAKIDPILBARQNFAYGTQHDYFDHNIIGWTREGNTT 420  
Qy 421 HPNSGLATIMSDGAGNKMVFGRNKAGOVWTDITGNRAGTGTINADGNGHFSVNGGSVS 480  
Db 421 HPNSGLATIMSDGPGGRKMYVQGNKAGOVWHDITGNKPGTGTINADGNGHFSVNGGSVS 480  
Qy 481 IWVWK 485

Db 481 IWVWK 485  
RESULT 29  
US-09-354-191A-2  
; Sequence 2, Application US/09354191A  
; Patent No. 6293498  
; GENERAL INFORMATION:  
; APPLICANT: Bisgard-Frantzen, Henrik  
; APPLICANT: Svendsen, Allan  
; APPLICANT: Borcherdt, Torben Vedel  
; TITLE OF INVENTION: AMYLASE VARIANTS  
; NUMBER OF SEQUENCES: 32  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: No. 62970380 No. 62970380 disk of No. 62970380th America, Inc.  
; STREET: 405 Lexington Avenue, Suite 6400  
; CITY: New York  
; STATE: New York  
; COUNTRY: U.S.A.  
; ZIP: 10174-6401  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/354,191A  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/600,656  
; FILING DATE:  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Lambiris, Elias J.  
; REGISTRATION NUMBER: 33,728  
; REFERENCE/DOCKET NUMBER: 4318.204-US  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 212 867 0123  
; TELEFAX: 212 867 0298  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 485 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
US-09-354-191A-2

Query Match 90.0%; Score 2437; DB 2; Length 485;  
Best Local Similarity 86.8%; Pred. No. 1.1e-201;  
Matches 421; Conservative 36; Mismatches 28; Indels 0; Gaps 0;  
Qy 1 HNGTNGTMMQYFWYLPNDGNHNRRLSDASNLKDKGISAVTIPPAWKASQNDVGYGA 60  
Db 1 HNGTNGTMMQYFEWHLFNDGNHNRRLSDASNLKDKGISAVTIPPAWKASQNDVGYGA 60  
Qy 61 YDLYLGEFNQKGTIRTKYGTNRQLOAAVNAKNSGIVQYGVVNMHKGADATENVAV 120  
Db 61 YDLYLGEFNQKGTIRTKYGTNRQLOAAVNAKNSGIVQYGVVNMHKGADATENVAV 120  
Qy 121 EVNPNRNRQESGYTIEAWTKFDPGRGNTHSNFKRWYHFDGVDWDQSRKLNRIYKF 180  
Db 121 EVNPNRNRQESGYTIEAWTKFDPGRGNTHSNFKRWYHFDGVDWDQSRKLNRIYKF 180  
Qy 181 RGDGKGDWDEVDTEGNGYDLYMADI DMHPVNNELRNWGVYNTLTGLDGFRIIDAVKH 240  
Db 181 RGDGKGDWDEVDTEGNGYDLYMADI DMHPVNNELRNWGVYNTLTGLDGFRIIDAVKH 240  
Qy 241 IKYSPTDWINHVRNATGKMFVAEFAFWKNDLGALENYLNKTNHNSVFDVPLHYNLNA 300  
Db 241 IKYSPTDWINHVRNATGKMFVAEFAFWKNDLGALENYLNKTNHNSVFDVPLHYNLNA 300

QY 301 SKSGNYDMRQIFNGTIVVQKHPMAVTFVDNHDSPQEEALESFVEEFKPLAYALTLTRE 360  
DB 301 SNSGNYDMAKLLNGTIVVQKHPMAVTFVDNHDSPQESLESFVQWFFKPLAYALTLTRE 360  
QY 361 QGYPVSFYGDYGIPTGHPVPAKSKIDPILBARQKAYGRQNDYLDHNNIIGWTRGNTA 420  
DB 361 QGYPVSFYGDYGIPTGHPVPAKAKIDPILBARQNFAYGTQHDYFDHNNIIGWTRGNTT 420  
QY 421 HNSGLATIMSDGAGGNKMFVGRNKAQGVWTDITGNRAGTIVTINADGWNFSVNGGSVS 480  
DB 421 HNSGLATIMSDGPGGKMYGVGNKAGQVWHDITGNKPGTIVTINADGWNFSVNGGSVS 480  
QY 481 IWYK 485  
DB 481 IWYK 485

RESULT 30  
US-09-290-734-2  
Sequence 2, Application US/09290734  
Patent No. 6361989

GENERAL INFORMATION:  
APPLICANT: Svendsen, Allan  
APPLICANT: Borchert, Torben Vedel  
APPLICANT: Bisgard-Frantzen Henrik  
APPLICANT: Outtrup, Helle  
APPLICANT: Nielsen, Bjarne Ronfeldt  
APPLICANT: Nielsen, Vibeke Skovgaard  
APPLICANT: Hoeck, Lisbeth Hedegaard  
TITLE OF INVENTION: No. 6361989el -Amylase And -Amylase Mutants  
FILE REFERENCE: 5276.400-US  
CURRENT APPLICATION NUMBER: US/09/290,734  
CURRENT FILING DATE: 1999-04-13  
NUMBER OF SEQ ID NOS: 35  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 2  
LENGTH: 485  
TYPE: PRT  
ORGANISM: Bacillus sp.  
US-09-290-734-2

Query Match 90.0%; Score 2437; DB 2; Length 485;  
Best Local Similarity 86.8%; Pred. No. 1.1e-201;  
Matches 421; Conservative 36; Mismatches 28; Indels 0; Gaps 0;

QY 1 HNGTNGTMMQYFEWYLPNDGNHNRLRSDASNLKDGISAVIIPPAWKGSQNDVGGA 60  
DB 1 HNGTNGTMMQYFEWYLPNDGNHNRLRSDASNLNRRGITAIIWIPPAWKGSQNDVGGA 60  
QY 61 YDLYLGEFNGKGTIRTKYGTNRLOAAVNAKLSNGIOVYGDVVMNHHKGGADATEMVRV 120  
DB 61 YDLYLGEFNGKGTIRTKYGTNRLOAAVNAKLSNGIOVYGDVVMNHHKGGADATEMVRV 120  
QY 121 EVNPNRNRQESGYTIEAWTKFDPGCRGNTHSNFKRWYHFDGVDMDQSRKLNRIYKF 180  
DB 121 EVNPNRNRQESGYTIEAWTKFDPGCRGNTHSNFKRWYHFDGVDMDQSRKLNRIYKF 180  
QY 181 RGDKGHDWEVDTEGNYDYLMTADIDMDHPEVNVNLRNMGWYNTLGLDGFRIIDAVKH 240  
DB 181 RGDKGHDWEVDTEGNYDYLMTADIDMDHPEVNVNLRNMGWYNTLGLDGFRIIDAVKH 240  
QY 241 IKYSFTRDWLNHRVRSATGKNMFAVAEFKNDLGALENTLNKTNHNSVDFVPLHYNLYNA 300  
DB 241 IKYSFTRDWLNHRVRSATGKNMFAVAEFKNDLGALENTLNKTNHNSVDFVPLHYNLYNA 300  
QY 301 SKSGNYDMRQIFNGTIVVQKHPMAVTFVDNHDSPQEEALESFVEEFKPLAYALTLTRE 360  
DB 301 SNSGNYDMAKLLNGTIVVQKHPMAVTFVDNHDSPQESLESFVQWFFKPLAYALTLTRE 360  
QY 361 QGYPVSFYGDYGIPTGHPVPAKSKIDPILBARQKAYGRQNDYLDHNNIIGWTRGNTA 420  
DB 361 QGYPVSFYGDYGIPTGHPVPAKAKIDPILBARQNFAYGTQHDYFDHNNIIGWTRGNTT 420

QY 421 HNSGLATIMSDGAGGNKMFVGRNKAQGVWTDITGNRAGTIVTINADGWNFSVNGGSVS 480  
DB 421 HNSGLATIMSDGPGGKMYGVGNKAGQVWHDITGNKPGTIVTINADGWNFSVNGGSVS 480  
QY 481 IWYK 485  
DB 481 IWYK 485

RESULT 31  
US-09-290-734-8  
Sequence 8, Application US/09290734  
Patent No. 6361989

GENERAL INFORMATION:  
APPLICANT: Svendsen, Allan  
APPLICANT: Borchert, Torben Vedel  
APPLICANT: Bisgard-Frantzen Henrik  
APPLICANT: Outtrup, Helle  
APPLICANT: Nielsen, Bjarne Ronfeldt  
APPLICANT: Nielsen, Vibeke Skovgaard  
APPLICANT: Hoeck, Lisbeth Hedegaard  
TITLE OF INVENTION: No. 6361989el -Amylase And -Amylase Mutants  
FILE REFERENCE: 5276.400-US  
CURRENT APPLICATION NUMBER: US/09/290,734  
CURRENT FILING DATE: 1999-04-13  
NUMBER OF SEQ ID NOS: 35  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 8  
LENGTH: 485  
TYPE: PRT  
ORGANISM: Bacillus sp.  
US-09-290-734-8

Query Match 90.0%; Score 2437; DB 2; Length 485;  
Best Local Similarity 86.8%; Pred. No. 1.1e-201;  
Matches 421; Conservative 36; Mismatches 28; Indels 0; Gaps 0;

QY 1 HNGTNGTMMQYFEWYLPNDGNHNRLRSDASNLKDGISAVIIPPAWKGSQNDVGGA 60  
DB 1 HNGTNGTMMQYFEWYLPNDGNHNRLRSDASNLNRRGITAIIWIPPAWKGSQNDVGGA 60  
QY 61 YDLYLGEFNGKGTIRTKYGTNRLOAAVNAKLSNGIOVYGDVVMNHHKGGADATEMVRV 120  
DB 61 YDLYLGEFNGKGTIRTKYGTNRLOAAVNAKLSNGIOVYGDVVMNHHKGGADATEMVRV 120  
QY 121 EVNPNRNRQESGYTIEAWTKFDPGCRGNTHSNFKRWYHFDGVDMDQSRKLNRIYKF 180  
DB 121 EVNPNRNRQESGYTIEAWTKFDPGCRGNTHSNFKRWYHFDGVDMDQSRKLNRIYKF 180  
QY 181 RGDKGHDWEVDTEGNYDYLMTADIDMDHPEVNVNLRNMGWYNTLGLDGFRIIDAVKH 240  
DB 181 RGDKGHDWEVDTEGNYDYLMTADIDMDHPEVNVNLRNMGWYNTLGLDGFRIIDAVKH 240  
QY 241 IKYSFTRDWLNHRVRSATGKNMFAVAEFKNDLGALENTLNKTNHNSVDFVPLHYNLYNA 300  
DB 241 IKYSFTRDWLNHRVRSATGKNMFAVAEFKNDLGALENTLNKTNHNSVDFVPLHYNLYNA 300  
QY 301 SKSGNYDMRQIFNGTIVVQKHPMAVTFVDNHDSPQEEALESFVEEFKPLAYALTLTRE 360  
DB 301 SNSGNYDMAKLLNGTIVVQKHPMAVTFVDNHDSPQESLESFVQWFFKPLAYALTLTRE 360  
QY 361 QGYPVSFYGDYGIPTGHPVPAKSKIDPILBARQKAYGRQNDYLDHNNIIGWTRGNTA 420  
DB 361 QGYPVSFYGDYGIPTGHPVPAKAKIDPILBARQNFAYGTQHDYFDHNNIIGWTRGNTT 420  
QY 421 HNSGLATIMSDGAGGNKMFVGRNKAQGVWTDITGNRAGTIVTINADGWNFSVNGGSVS 480  
DB 421 HNSGLATIMSDGPGGKMYGVGNKAGQVWHDITGNKPGTIVTINADGWNFSVNGGSVS 480  
QY 481 IWYK 485  
DB 481 IWYK 485

RESULT 32  
US-09-381-687-3  
Sequence 3, Application US/99381687  
Patent No. 6486113

GENERAL INFORMATION:  
APPLICANT: HATADA, Koji

APPLICANT: IKAWA, Kaori  
APPLICANT: ITO, Susumu  
APPLICANT: IGARASHI, Kazuaki  
APPLICANT: HAGIHARA, Hiroshi  
APPLICANT: HAYASHI, Yasuhiro  
APPLICANT: ARAKI, Hiroyuki  
APPLICANT: OZAKI, Katsuya  
TITLE OF INVENTION: MUTANT ALPHA-AMYLASES

FILE REFERENCE: 2173-0115P  
CURRENT APPLICATION NUMBER: US/09/381,687  
CURRENT FILING DATE: 1999-09-23  
NUMBER OF SEQ ID NOS: 25

SOFTWARE: Patentin version 3.0  
SEQ ID NO 3  
LENGTH: 485  
TYPE: PRT  
ORGANISM: Bacillus sp.  
US-09-381-687-3

Query Match 90.0%; Score 2437; DB 2; Length 485;  
Best Local Similarity 86.8%; Pred. No. 1.1e-201;  
Matches 421; Conservative 36; Mismatches 28; Indels 0; Gaps 0;

QY 1 HNGTNGTMMQYFEWYLPNDGNHNRRLSDASNLKDKGISAVWIPPAWKASQNDVGYCA 60  
DB 1 HNGTNGTMMQYFEWYLPNDGNHNRRLSDASNLKDKGISAVWIPPAWKASQNDVGYCA 60  
QY 61 YDLYLGEFNGKQGTIRTKYGTNRQLQAAVNAKNSGIVQYGVVNNHKGADATEMVRV 120  
DB 61 YDLYLGEFNGKQGTIRTKYGTNRQLQAAVNAKNSGIVQYGVVNNHKGADATEMVRV 120  
QY 121 EVNPNRNQEVSGEYTIETAWTKFDPFGNGNTHSNFKRWYHFDGVDWDQSRKLNRIYKF 180  
DB 121 EVNPNRNQEVSGEYTIETAWTKFDPFGNGNTHSNFKRWYHFDGVDWDQSRKLNRIYKF 180  
QY 181 RGDGKWDWEVDTEGNYDYLADIMDHPVNNELRWGNYTNTLGLDGFRIIDAVKH 240  
DB 181 RGDGKWDWEVDTEGNYDYLADIMDHPVNNELRWGNYTNTLGLDGFRIIDAVKH 240  
QY 241 IKYSFTRDWINHRSATGKMPFAVEFWKNDLGALENLYKTNWNSHVSFVDFVPLHYNLYNA 300  
DB 241 IKYSFTRDWINHRSATGKMPFAVEFWKNDLGALENLYKTNWNSHVSFVDFVPLHYNLYNA 300  
QY 301 SKSGNGYDMRQIFNGTVVQHPMAHTFVDNHDSPSEALSFVBEWFKPLAYALTRE 360  
DB 301 SKSGNGYDMRQIFNGTVVQHPMAHTFVDNHDSPSEALSFVBEWFKPLAYALTRE 360  
QY 361 QGYPVSFYGDYGIPTGHPVPAKSKIDPILARQKAYAGRONDYLDHNIIGWTREGNTA 420  
DB 361 QGYPVSFYGDYGIPTGHPVPAKSKIDPILARQKAYAGRONDYLDHNIIGWTREGNTA 420  
QY 421 HPNSGLATIMSDGAGNKMFPVGRNKAQGVWTDITGNRAGTITINADGWNFSVNGGVS 480  
DB 421 HPNSGLATIMSDGAGNKMFPVGRNKAQGVWTDITGNRAGTITINADGWNFSVNGGVS 480  
QY 481 IWVKN 485  
DB 481 IWVKN 485

RESULT 33  
US-09-545-586-2  
Sequence 2, Application US/09545586  
Patent No. 6528298  
GENERAL INFORMATION:  
APPLICANT: Svendsen, Allan

APPLICANT: Borchert, Torben Vedel  
APPLICANT: Bisgard-Frantzen Henrik  
APPLICANT: Outtrup, Helle  
APPLICANT: Nielsen, Bjarne Ronfeldt  
APPLICANT: Nielsen, Vibeke Skovgaard  
APPLICANT: Hoeck, Liebeth Hedegaard  
TITLE OF INVENTION: No. 6528298el -Amylase And -Amylase Mutants  
FILE REFERENCE: 5276.400-US  
CURRENT APPLICATION NUMBER: US/09/545,586  
CURRENT FILING DATE: 2000-04-07  
PRIOR APPLICATION NUMBER: US/09/290,734  
PRIOR FILING DATE: 1999-04-13  
NUMBER OF SEQ ID NOS: 35  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 2  
LENGTH: 485  
TYPE: PRT  
ORGANISM: Bacillus sp.  
US-09-545-586-2

Query Match 90.0%; Score 2437; DB 2; Length 485;  
Best Local Similarity 86.8%; Pred. No. 1.1e-201;  
Matches 421; Conservative 36; Mismatches 28; Indels 0; Gaps 0;

QY 1 HNGTNGTMMQYFEWYLPNDGNHNRRLSDASNLKDKGISAVWIPPAWKASQNDVGYCA 60  
DB 1 HNGTNGTMMQYFEWYLPNDGNHNRRLSDASNLKDKGISAVWIPPAWKASQNDVGYCA 60  
QY 61 YDLYLGEFNGKQGTIRTKYGTNRQLQAAVNAKNSGIVQYGVVNNHKGADATEMVRV 120  
DB 61 YDLYLGEFNGKQGTIRTKYGTNRQLQAAVNAKNSGIVQYGVVNNHKGADATEMVRV 120  
QY 121 EVNPNRNQEVSGEYTIETAWTKFDPFGNGNTHSNFKRWYHFDGVDWDQSRKLNRIYKF 180  
DB 121 EVNPNRNQEVSGEYTIETAWTKFDPFGNGNTHSNFKRWYHFDGVDWDQSRKLNRIYKF 180  
QY 181 RGDGKWDWEVDTEGNYDYLADIMDHPVNNELRWGNYTNTLGLDGFRIIDAVKH 240  
DB 181 RGDGKWDWEVDTEGNYDYLADIMDHPVNNELRWGNYTNTLGLDGFRIIDAVKH 240  
QY 241 IKYSFTRDWINHRSATGKMPFAVEFWKNDLGALENLYKTNWNSHVSFVDFVPLHYNLYNA 300  
DB 241 IKYSFTRDWINHRSATGKMPFAVEFWKNDLGALENLYKTNWNSHVSFVDFVPLHYNLYNA 300  
QY 301 SKSGNGYDMRQIFNGTVVQHPMAHTFVDNHDSPSEALSFVBEWFKPLAYALTRE 360  
DB 301 SKSGNGYDMRQIFNGTVVQHPMAHTFVDNHDSPSEALSFVBEWFKPLAYALTRE 360  
QY 361 QGYPVSFYGDYGIPTGHPVPAKSKIDPILARQKAYAGRONDYLDHNIIGWTREGNTA 420  
DB 361 QGYPVSFYGDYGIPTGHPVPAKSKIDPILARQKAYAGRONDYLDHNIIGWTREGNTA 420  
QY 421 HPNSGLATIMSDGAGNKMFPVGRNKAQGVWTDITGNRAGTITINADGWNFSVNGGVS 480  
DB 421 HPNSGLATIMSDGAGNKMFPVGRNKAQGVWTDITGNRAGTITINADGWNFSVNGGVS 480  
QY 481 IWVKN 485  
DB 481 IWVKN 485

RESULT 34  
US-09-545-586-8  
Sequence 8, Application US/09545586  
Patent No. 6528298  
GENERAL INFORMATION:  
APPLICANT: Svendsen, Allan  
APPLICANT: Borchert, Torben Vedel  
APPLICANT: Bisgard-Frantzen Henrik  
APPLICANT: Outtrup, Helle  
APPLICANT: Nielsen, Bjarne Ronfeldt  
APPLICANT: Nielsen, Vibeke Skovgaard  
APPLICANT: Hoeck, Liebeth Hedegaard



; TITLE OF INVENTION: No. 6528298el -Amylase And -Amylase Mutants  
 ; FILE REFERENCE: 5276.400-US  
 ; CURRENT APPLICATION NUMBER: US/09/545,586  
 ; PRIOR FILING DATE: 2000-04-07  
 ; PRIOR APPLICATION NUMBER: US/09/290,734  
 ; PRIOR FILING DATE: 1999-04-13  
 ; NUMBER OF SEQ ID NOS: 35  
 ; SOFTWARE: FastSEQ for Windows Version 3.0  
 ; SEQ ID NO 8  
 ; LENGTH: 485  
 ; TYPE: PRT  
 ; ORGANISM: Bacillus sp.  
 US-09-545-586-8

Query Match  
 Best Local Similarity 90.0%; Score 2437; DB 2; Length 485;  
 Matches 421; Conservative 36; Mismatches 28; Indels 0; Gaps 0;  
 QY 1 HHNGTGTMMQYFEWYLPNDGNHNRRLSDASNLKDKGISAVTIPPAWKASQNDVGYGA 60  
 DB 1 HHNGTGTMMQYFEWYLPNDGNHNRRLSDASNLKDKGISAVTIPPAWKASQNDVGYGA 60  
 QY 61 YDLYDLGEFNGKGTIRTKYGTNRQLQAVALNKSNGIQYGVGVMMHKGADATEMVRV 120  
 DB 61 YDLYDLGEFNGKGTIRTKYGTNRQLQAVALNKSNGIQYGVGVMMHKGADATEMVRV 120  
 QY 121 EVNPNRNNOEVSSEYTIETAWTKFDPGRCNTHSNFKRWYTHFDGVDWDQSRKLNRIYKF 180  
 DB 121 EVNPNRNNOEVSSEYTIETAWTKFDPGRCNTHSNFKRWYTHFDGVDWDQSRKLNRIYKF 180  
 QY 181 RGDGKMDWEVDTEGNGNDYLMYADIMDHPVNNELRWGVYVNTTLGLDGRIDAVKH 240  
 DB 181 RGDGKMDWEVDTEGNGNDYLMYADIMDHPVNNELRWGVYVNTTLGLDGRIDAVKH 240  
 QY 241 IKYSFTRDWINHVRNATGKMFVAFWKNDLGAIENYLNKTNWHSVDFVPLHYNLYNA 300  
 DB 241 IKYSFTRDWINHVRNATGKMFVAFWKNDLGAIENYLNKTNWHSVDFVPLHYNLYNA 300  
 QY 301 SKSGGNYDMRQIFNGTVVQRHPMHAFTVVDNHDSPBEALSFVVEWFKPLAYALTRE 360  
 DB 301 SKSGGNYDMRQIFNGTVVQRHPMHAFTVVDNHDSPBEALSFVVEWFKPLAYALTRE 360  
 QY 361 QYPSVFGYDYGIPHTGVPAMKSKIDPILBARQKAYGRONDYLDHNIIGWTREGNTA 420  
 DB 361 QYPSVFGYDYGIPHTGVPAMKSKIDPILBARQKAYGRONDYLDHNIIGWTREGNTA 420  
 QY 421 HPNSGLATIMSDGAGCKMVFGRNKAQGVWTDITGNRAGTITINADGWNFSVNGGSVS 480  
 DB 421 HPNSGLATIMSDGAGCKMVFGRNKAQGVWTDITGNRAGTITINADGWNFSVNGGSVS 480  
 QY 481 IWVWK 485  
 DB 481 IWVWK 485

RESULT 35  
 US-09-769-864-2  
 ; Sequence 8, Application US/09/769864  
 ; Patent No. 6673589  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Beechert, Torben V.  
 ; APPLICANT: Svendsen, Allan  
 ; APPLICANT: Andersen, Carsten  
 ; APPLICANT: Nielsen, Bjarne  
 ; APPLICANT: Nissen, Torben L.  
 ; APPLICANT: Kjaerulff, Soren  
 ; TITLE OF INVENTION: Alpha-Amylase Mutants  
 ; FILE REFERENCE: 5368.200-US  
 ; CURRENT APPLICATION NUMBER: US/09/769,864  
 ; PRIOR FILING DATE: 2001-01-25  
 ; PRIOR APPLICATION NUMBER: 09/183,412  
 ; NUMBER OF SEQ ID NOS: 58

; SOFTWARE: FastSEQ for Windows Version 3.0  
 ; SEQ ID NO 2  
 ; LENGTH: 485  
 ; TYPE: PRT  
 ; ORGANISM: Bacillus sp.  
 US-09-769-864-2

Query Match  
 Best Local Similarity 90.0%; Score 2437; DB 2; Length 485;  
 Matches 421; Conservative 36; Mismatches 28; Indels 0; Gaps 0;  
 QY 1 HHNGTGTMMQYFEWYLPNDGNHNRRLSDASNLKDKGISAVTIPPAWKASQNDVGYGA 60  
 DB 1 HHNGTGTMMQYFEWYLPNDGNHNRRLSDASNLKDKGISAVTIPPAWKASQNDVGYGA 60  
 QY 61 YDLYDLGEFNGKGTIRTKYGTNRQLQAVALNKSNGIQYGVGVMMHKGADATEMVRV 120  
 DB 61 YDLYDLGEFNGKGTIRTKYGTNRQLQAVALNKSNGIQYGVGVMMHKGADATEMVRV 120  
 QY 121 EVNPNRNNOEVSSEYTIETAWTKFDPGRCNTHSNFKRWYTHFDGVDWDQSRKLNRIYKF 180  
 DB 121 EVNPNRNNOEVSSEYTIETAWTKFDPGRCNTHSNFKRWYTHFDGVDWDQSRKLNRIYKF 180  
 QY 181 RGDGKMDWEVDTEGNGNDYLMYADIMDHPVNNELRWGVYVNTTLGLDGRIDAVKH 240  
 DB 181 RGDGKMDWEVDTEGNGNDYLMYADIMDHPVNNELRWGVYVNTTLGLDGRIDAVKH 240  
 QY 241 IKYSFTRDWINHVRNATGKMFVAFWKNDLGAIENYLNKTNWHSVDFVPLHYNLYNA 300  
 DB 241 IKYSFTRDWINHVRNATGKMFVAFWKNDLGAIENYLNKTNWHSVDFVPLHYNLYNA 300  
 QY 301 SKSGGNYDMRQIFNGTVVQRHPMHAFTVVDNHDSPBEALSFVVEWFKPLAYALTRE 360  
 DB 301 SKSGGNYDMRQIFNGTVVQRHPMHAFTVVDNHDSPBEALSFVVEWFKPLAYALTRE 360  
 QY 361 QYPSVFGYDYGIPHTGVPAMKSKIDPILBARQKAYGRONDYLDHNIIGWTREGNTA 420  
 DB 361 QYPSVFGYDYGIPHTGVPAMKSKIDPILBARQKAYGRONDYLDHNIIGWTREGNTA 420  
 QY 421 HPNSGLATIMSDGAGCKMVFGRNKAQGVWTDITGNRAGTITINADGWNFSVNGGSVS 480  
 DB 421 HPNSGLATIMSDGAGCKMVFGRNKAQGVWTDITGNRAGTITINADGWNFSVNGGSVS 480  
 QY 481 IWVWK 485  
 DB 481 IWVWK 485

RESULT 36  
 US-09-769-864-8  
 ; Sequence 8, Application US/09769864  
 ; Patent No. 6673589  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Beechert, Torben V.  
 ; APPLICANT: Svendsen, Allan  
 ; APPLICANT: Andersen, Carsten  
 ; APPLICANT: Nielsen, Bjarne  
 ; APPLICANT: Nissen, Torben L.  
 ; APPLICANT: Kjaerulff, Soren  
 ; TITLE OF INVENTION: Alpha-Amylase Mutants  
 ; FILE REFERENCE: 5368.200-US  
 ; CURRENT APPLICATION NUMBER: US/09/769,864  
 ; PRIOR FILING DATE: 2001-01-25  
 ; PRIOR APPLICATION NUMBER: 09/183,412  
 ; NUMBER OF SEQ ID NOS: 58  
 ; SOFTWARE: FastSEQ for Windows Version 3.0  
 ; SEQ ID NO 8  
 ; LENGTH: 485  
 ; TYPE: PRT  
 ; ORGANISM: Bacillus sp.  
 US-09-769-864-8

Query Match 90.0%; Score 2437; DB 2; Length 485;  
 Best Local Similarity 86.8%; Pred. No. 1.1e-201; Indels 0; Gaps 0;  
 Matches 421; Conservative 36; Mismatches 28; Indels 0; Gaps 0;

QY 1 HHNGTGTMMQYFEWYLPNDGNHNRSLRSDASNLKDGISAVWIPPAWKASQNDVGYGA 60  
 DB 1 HHNGTGTMMQYFEWYLPNDGNHNRSLRSDASNLKDGISAVWIPPAWKASQNDVGYGA 60  
 QY 61 YDLYDLGFEFNGKGTIRTKYGRNOLQAANVNAKSGIQVYGVVNNHKGADATENVRV 120  
 DB 61 YDLYDLGFEFNGKGTIRTKYGRNOLQAANVNAKSGIQVYGVVNNHKGADATENVRV 120  
 QY 121 EVNPNRNRQESGTYTTEAWTKFDPGGRNTHSNFKRWYHFDGVDWDSRKLNNRIYKF 180  
 DB 121 EVNPNRNRQESGTYTTEAWTKFDPGGRNTHSNFKRWYHFDGVDWDSRKLNNRIYKF 180  
 QY 181 RGDGKADWEVDSENGNYDLYMADIDMDHPEVNNELRWGYYTNTLGLDGRIDAVKH 240  
 DB 181 RGDGKADWEVDSENGNYDLYMADIDMDHPEVNNELRWGYYTNTLGLDGRIDAVKH 240  
 QY 241 IKYSTWDWLNHVRSAATGKNMFAVAFWKNLDLGAENYLNKTNWHSFVDPVPLHYNLYNA 300  
 DB 241 IKYSTWDWLNHVRSAATGKNMFAVAFWKNLDLGAENYLNKTNWHSFVDPVPLHYNLYNA 300  
 QY 301 SKSGGNYDMRQIFNGTVVQRHPMAHTFVDNHDSDPEALSFVEWPKLAYALTRE 360  
 DB 301 SKSGGNYDMRQIFNGTVVQRHPMAHTFVDNHDSDPEALSFVEWPKLAYALTRE 360  
 QY 361 QGYPVFFYDYGIIPTGHPVPAKSKIDPILRQKAYAGRONDYLDHNNIIGWTREGNTA 420  
 DB 361 QGYPVFFYDYGIIPTGHPVPAKSKIDPILRQKAYAGRONDYLDHNNIIGWTREGNTA 420  
 QY 421 HPNSGLATIMSDGAGNKMFMVGRNKAQGVWTDITGNRAGTVTINADGWNFSVNGGSVS 480  
 DB 421 HPNSGLATIMSDGAGNKMFMVGRNKAQGVWTDITGNRAGTVTINADGWNFSVNGGSVS 480  
 QY 481 IWVKN 485  
 DB 481 IWVKN 485

RESULT 37  
 US-10-025-648-2  
 Sequence 2, Application US/10025648  
 Patent No. 6867031  
 GENERAL INFORMATION:  
 APPLICANT: Biggaard-Frantzen, Henrik  
 Borchert, Torben Vedel  
 Svendsen, Allan  
 TITLE OF INVENTION: AMYLASE VARIANTS  
 NUMBER OF SEQUENCES: 32  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: No. 6867031o No. 6867031disk of No. 6867031th America, Inc.  
 STREET: 405 Lexington Avenue, Suite 6400  
 CITY: New York  
 STATE: New York  
 COUNTRY: U.S.A.  
 ZIP: 10174-6401  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: Patent in Release #1.0, Version #1.25 (EPO)  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/10/025,648  
 FILING DATE: 19-Dec-2001  
 CLASSIFICATION: <Unknown>  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 08/600,656  
 FILING DATE: 13-FEB-1996  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Lambiris, Elias J.  
 REGISTRATION NUMBER: 33,728

REFERENCE/DOCKET NUMBER: 4318.204-US  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 212 867 0123  
 TELEFAX: 212 867 0298  
 INFORMATION FOR SEQ ID NO: 2:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 485 amino acids  
 TYPE: amino acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: peptide  
 SEQUENCE DESCRIPTION: SEQ ID NO: 2:  
 US-10-025-648-2

Query Match 90.0%; Score 2437; DB 2; Length 485;  
 Best Local Similarity 86.8%; Pred. No. 1.1e-201;  
 Matches 421; Conservative 36; Mismatches 28; Indels 0; Gaps 0;

QY 1 HHNGTGTMMQYFEWYLPNDGNHNRSLRSDASNLKDGISAVWIPPAWKASQNDVGYGA 60  
 DB 1 HHNGTGTMMQYFEWYLPNDGNHNRSLRSDASNLKDGISAVWIPPAWKASQNDVGYGA 60  
 QY 61 YDLYDLGFEFNGKGTIRTKYGRNOLQAANVNAKSGIQVYGVVNNHKGADATENVRV 120  
 DB 61 YDLYDLGFEFNGKGTIRTKYGRNOLQAANVNAKSGIQVYGVVNNHKGADATENVRV 120  
 QY 121 EVNPNRNRQESGTYTTEAWTKFDPGGRNTHSNFKRWYHFDGVDWDSRKLNNRIYKF 180  
 DB 121 EVNPNRNRQESGTYTTEAWTKFDPGGRNTHSNFKRWYHFDGVDWDSRKLNNRIYKF 180  
 QY 181 RGDGKADWEVDSENGNYDLYMADIDMDHPEVNNELRWGYYTNTLGLDGRIDAVKH 240  
 DB 181 RGDGKADWEVDSENGNYDLYMADIDMDHPEVNNELRWGYYTNTLGLDGRIDAVKH 240  
 QY 241 IKYSTWDWLNHVRSAATGKNMFAVAFWKNLDLGAENYLNKTNWHSFVDPVPLHYNLYNA 300  
 DB 241 IKYSTWDWLNHVRSAATGKNMFAVAFWKNLDLGAENYLNKTNWHSFVDPVPLHYNLYNA 300  
 QY 301 SKSGGNYDMRQIFNGTVVQRHPMAHTFVDNHDSDPEALSFVEWPKLAYALTRE 360  
 DB 301 SKSGGNYDMRQIFNGTVVQRHPMAHTFVDNHDSDPEALSFVEWPKLAYALTRE 360  
 QY 361 QGYPVFFYDYGIIPTGHPVPAKSKIDPILRQKAYAGRONDYLDHNNIIGWTREGNTA 420  
 DB 361 QGYPVFFYDYGIIPTGHPVPAKSKIDPILRQKAYAGRONDYLDHNNIIGWTREGNTA 420  
 QY 421 HPNSGLATIMSDGAGNKMFMVGRNKAQGVWTDITGNRAGTVTINADGWNFSVNGGSVS 480  
 DB 421 HPNSGLATIMSDGAGNKMFMVGRNKAQGVWTDITGNRAGTVTINADGWNFSVNGGSVS 480  
 QY 481 IWVKN 485  
 DB 481 IWVKN 485

RESULT 38  
 US-09-441-313-2  
 Sequence 2, Application US/09441313  
 Patent No. 6887986  
 GENERAL INFORMATION:  
 APPLICANT: Svendsen, Allan  
 APPLICANT: Kjruliff, S ren  
 APPLICANT: Bisgaard-Frantzen, Henrik  
 APPLICANT: Andersen, Carsten  
 TITLE OF INVENTION: -Amylase Variants  
 FILE REFERENCE: 5709.000-US  
 CURRENT APPLICATION NUMBER: US/09/441,313  
 CURRENT FILING DATE: 1999-11-16  
 EARLIER APPLICATION NUMBER: 09/193,068  
 EARLIER FILING DATE: 1998-11-16  
 NUMBER OF SEQ ID NOS: 31  
 SOFTWARE: FastSeq for Windows Version 3.0  
 SEQ ID NO 2

US-09-441-313-2

Query Match  
Best Local Similarity 90.0%; Score 2437; DB 2; Length 485;  
Matches 421; Conservative 36; Mismatches 28; Indels 0; Gaps 0;

QY 1 HNGTNGTMOQYFEWYLPNDGNHNRRLSDASNLKDKGISAVWIPPAWKASQNDVGCGA 60  
DB 1 HNGTNGTMOQYFEWYLPNDGNHNRRLSDASNLKDKGISAVWIPPAWKASQNDVGCGA 60

QY 61 YDLVDLGEFNGKGTIRTKYGTNRNOLQAAVNAKNSGIOVYGVVNNHKGADATENVLAV 120  
DB 61 YDLVDLGEFNGKGTIRTKYGTNRNOLQAAVNAKNSGIOVYGVVNNHKGADATENVLAV 120

QY 121 EVNPNRNOEVSGETYIEAWTKFDPGGRGNTHSNFKRWYHFDGVDWDQSRKLNRIYKF 180  
DB 121 EVNPNRNOEVSGETYIEAWTKFDPGGRGNTHSNFKRWYHFDGVDWDQSRKLNRIYKF 180

QY 181 RGDGKMDWEVDTEGNYDYLKYADIDMDHPEVNNELRWGVTNTLGLDGFRIIDAVKH 240  
DB 181 RGDGKMDWEVDTEGNYDYLKYADIDMDHPEVNNELRWGVTNTLGLDGFRIIDAVKH 240

QY 241 IKYSFTDRWINHVSATGKNMFAVAFWKNDLGAIENYLNKTNWHSVDFVPLHYNLNA 300  
DB 241 IKYSFTDRWINHVSATGKNMFAVAFWKNDLGAIENYLNKTNWHSVDFVPLHYNLNA 300

QY 301 SKSGNYDMRQIFNGTVVQRHPMHAFTFVDNHDSPQEEALESFVSEWFKPLAYALITRE 360  
DB 301 SKSGNYDMRQIFNGTVVQRHPMHAFTFVDNHDSPQEEALESFVSEWFKPLAYALITRE 360

QY 361 QGYPSVFGYDYGIPTHGVPAKSKIDPILARQKAYGRONDYLDHNNIIGWTREGNTA 420  
DB 361 QGYPSVFGYDYGIPTHGVPAKSKIDPILARQKAYGRONDYLDHNNIIGWTREGNTA 420

QY 421 HPNSGLATIMSDGAGGNKMFVGRNKGQVWTDITGNRAGTGTINADGNGFVNGGSGVS 480  
DB 421 HPNSGLATIMSDGAGGNKMFVGRNKGQVWTDITGNRAGTGTINADGNGFVNGGSGVS 480

QY 481 IWVWK 485  
DB 481 IWVWK 485

RESULT 39  
US-09-441-313-8  
Sequence 8, Application US/09441313  
Patent No. 6887986  
GENERAL INFORMATION:  
APPLICANT: Swendsen, Allan  
APPLICANT: Kjoluff, S ren  
APPLICANT: Bisgaard-Frantzen, Henrik  
APPLICANT: Andersen, Carsten  
TITLE OF INVENTION: Amylase Variants  
FILE REFERENCE: 5709.000-US  
CURRENT APPLICATION NUMBER: US/09/441.313  
CURRENT FILING DATE: 1999-11-16  
EARLIER APPLICATION NUMBER: 09/193.068  
EARLIER FILING DATE: 1998-11-16  
NUMBER OF SEQ ID NOS: 31  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 8  
LENGTH: 485  
TYPE: PRT  
ORGANISM: Bacillus sp.  
US-09-441-313-8

Query Match  
Best Local Similarity 90.0%; Score 2437; DB 2; Length 485;  
Matches 421; Conservative 36; Mismatches 28; Indels 0; Gaps 0;

QY 1 HNGTNGTMOQYFEWYLPNDGNHNRRLSDASNLKDKGISAVWIPPAWKASQNDVGCGA 60  
DB 1 HNGTNGTMOQYFEWYLPNDGNHNRRLSDASNLKDKGISAVWIPPAWKASQNDVGCGA 60

QY 61 YDLVDLGEFNGKGTIRTKYGTNRNOLQAAVNAKNSGIOVYGVVNNHKGADATENVLAV 120  
DB 61 YDLVDLGEFNGKGTIRTKYGTNRNOLQAAVNAKNSGIOVYGVVNNHKGADATENVLAV 120

QY 121 EVNPNRNOEVSGETYIEAWTKFDPGGRGNTHSNFKRWYHFDGVDWDQSRKLNRIYKF 180  
DB 121 EVNPNRNOEVSGETYIEAWTKFDPGGRGNTHSNFKRWYHFDGVDWDQSRKLNRIYKF 180

QY 181 RGDGKMDWEVDTEGNYDYLKYADIDMDHPEVNNELRWGVTNTLGLDGFRIIDAVKH 240  
DB 181 RGDGKMDWEVDTEGNYDYLKYADIDMDHPEVNNELRWGVTNTLGLDGFRIIDAVKH 240

QY 241 IKYSFTDRWINHVSATGKNMFAVAFWKNDLGAIENYLNKTNWHSVDFVPLHYNLNA 300  
DB 241 IKYSFTDRWINHVSATGKNMFAVAFWKNDLGAIENYLNKTNWHSVDFVPLHYNLNA 300

QY 301 SKSGNYDMRQIFNGTVVQRHPMHAFTFVDNHDSPQEEALESFVSEWFKPLAYALITRE 360  
DB 301 SKSGNYDMRQIFNGTVVQRHPMHAFTFVDNHDSPQEEALESFVSEWFKPLAYALITRE 360

QY 361 QGYPSVFGYDYGIPTHGVPAKSKIDPILARQKAYGRONDYLDHNNIIGWTREGNTA 420  
DB 361 QGYPSVFGYDYGIPTHGVPAKSKIDPILARQKAYGRONDYLDHNNIIGWTREGNTA 420

QY 421 HPNSGLATIMSDGAGGNKMFVGRNKGQVWTDITGNRAGTGTINADGNGFVNGGSGVS 480  
DB 421 HPNSGLATIMSDGAGGNKMFVGRNKGQVWTDITGNRAGTGTINADGNGFVNGGSGVS 480

QY 481 IWVWK 485  
DB 481 IWVWK 485

RESULT 40  
US-08-446-803-1  
Sequence 1, Application US/08446803  
Patent No. 5824531  
GENERAL INFORMATION:  
APPLICANT: Ottrup, Helle  
APPLICANT: Bisgaard-Frantzen, Henrik  
APPLICANT: Ostergaard, Peter Rahbek  
APPLICANT: Rasmussen, Michael Dolberg  
APPLICANT: Van Der Zee, Pia  
TITLE OF INVENTION: Alkaline Bacillus Amylase  
NUMBER OF SEQUENCES: 5  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: No. 5824531o No. 5824531disk of No. 5824531th America  
STREET: 405 Lexington Avenue  
CITY: New York  
STATE: New York  
COUNTRY: USA  
ZIP: 10174  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/446,803  
FILING DATE: 01-June-1995  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Harrington, James J.  
REGISTRATION NUMBER: 38,711  
REFERENCE/DOCKET NUMBER: 4157.204-US  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 867-0123  
TELEFAX: (212) 878-9655  
INFORMATION FOR SEQ ID NO: 1: